BRUHAT BANAGLORE MAHANAGARA PALIKE

Executive Engineer -yelahanka Division

Detailed Estimate

Name of the Work Asphalting and improvements to roads at Shivanahalli main and cross roads ward No-01 of yelahanka sub division.

Estimate Amount : 4000000.00

Sl. No.	Description of item	Unit	Nos	Dimension			Total Qty	Rate in Rs	Amount in Rs
				L in m	B in m	D in m			
	CIVIL WORKS								
1	KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 **(Page No142., I.No.19.1 of KPWD S.R 2016-17).**								
	Basic rate	Cum. 82.00							
	Area Wieght age @ 6%	4.92							
	Total Rate in Rs	86.92							
	New drain								
	6th Cross road from 2nd main road to dead end								
	Ch: (0 - 108)		1	108	1.20	0.800	103.68		
	2nd Cross road from 2nd main road to dead end								
	Ch: (0 - 189)		1	189	1.20	0.800	181.44		
	Surabhi layout 3rd main road from Jakkura Main road to 1st Cross Road								
	Ch: (0 - 39)		1	39	1.10	0.800	34.32		
							319.44	**86.92**	**27765.72**
2	KSRB 4-1.2 : Providing and laying in position plain cement concrete of mix1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregtes @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted,in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications.Specification No. KBS 4.1, 4.2. **(Page No 12., I.No.4.2 of KPWD S.R 2016-17).**								
	Basic rate	Cum. 5046.00							
	Area Wieght age @ 6%	302.76							
	Total Rate in Rs	5348.76							
	New drain								
	6th Cross road from 2nd main road to dead end								
	Ch: (0 - 108)		1	108	0.90	0.100	9.72		
	2nd Cross road from 2nd main road to dead end								
	Ch: (0 - 189)		1	189	0.90	0.100	17.01		
	Surabhi layout 3rd main road from Jakkura Main road to 1st Cross Road								
	Ch: (0 - 39)		1	39	0.90	0.100	3.51		
							30.24	**5348.76**	**161746.50**
3	Providing and laying Plain /reinforced cement concrete for side drains wall and bottom thickness 15cm using M20 nominal mix concrete with OPC cement at 300kg with 20mm and down size granite metal coarse aggregate at 0.69 cum and fine aggregate at 0.43 cum machine mixed well compacted for walls at bottom including centring shuttering cost of materials HOM of machineries curing etc.completeexcluding cost of steel as per MORTH specification No.1500,1700,2200 **(Page No265., I.No.37.59.2 of KPWD S.R 2016-17).**								
	Basic rate	Cum. 10408.00							
	Area Wieght age @ 6%	624.48							
	Total Rate in Rs	11032.48							
	New drain								
	Raft								
	6th Cross road from 2nd main road to dead end								
	Ch: (0 - 108)		1	108	0.90	0.150	14.58		

Asst. Executive Engineer
Yelahanka Sub. Division
(BBMP Ynk. Zn)
Yelahanka, Bangalore

Sl. No.	Description of item	Unit	Nos	Dimension			Total Qty	Rate in Rs	Amount in Rs
				L in m	B in m	D in m			
	2nd Cross road from 2nd main road to dead end								
	Ch. (0 - 189)		1	189	0.90	0.150	25.52		
	Surabhi layout 3rd main road from Jakkura Main road to 1st Cross Road								
	Ch. (0 - 39)		1	39	0.90	0.150	5.27		
	Wall								
	6th Cross road from 2nd main road to dead end								
	Ch. (0 - 108)		2	108	0.15	0.800	25.92		
	2nd Cross road from 2nd main road to dead end								
	Ch. (0 - 189)		2	189	0.15	0.800	45.36		
	Surabhi layout 3rd main road from Jakkura Main road to 1st Cross Road								
	Ch. (0 - 39)		2	39	0.15	0.800	9.36		
							126.00	**11032.48**	**1390092.48**
4	KSRB 4.9.2 Providing T M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 for TMT Bars Fe500								
	(Page No 17., I.No.4.46.2 of KPWD S.R 2016-17).								
		Tonne							
	Basic rate	*56050.00*							
	Area Wieght age @ 6%	*3363.00*							
	Total Rate in Rs	*59413.00*							
	New drain								
	Taking 50kg/cum						6.30		
							6.30	**59413.00**	**374301.90**
5	Providing precast slab of 100 mm thick including cost of all materials, labour, curing,transportation,loading ,unloading,etc ,complete as per the direction of engineer in charge-								
	Data rate								
		Sqm							
	Total Rate in Rs	*1757.00*							
	6th Cross road from 2nd main road to dead end								
	Ch. (0 - 108)		1	108	0.90		97.20		
	2nd Cross road from 2nd main road to dead end								
	Ch. (0 - 189)		1	189	0.90		170.10		
	Surabhi layout 3rd main road from Jakkura Main road to 1st Cross Road								
	Ch. (0 - 39)		1	39	0.90		35.10		
							302.40	**1757.00**	**531316.80**
	Sub total-1								**2485223.40**
	ROAD WORKS								
6	KSRRB M300-14. Excavation for roadwork in all type of soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location to a lead of 1.00 km and complete as per specifications. MORTH Specification No.301								
	(Page No 143., I.No.19.14 of KPWD S.R 2016-17).								
		Cum.							
	Basic rate	*46.00*							
	Area Wieght age @ 6%	*2.76*							
	Total Rate in Rs	*48.76*							
	new contruction								
	6th Cross road from 2nd main road to dead end								
	Ch. (0 - 108)		1	108	5.50	0.325	193.05		
	Surabhi layout 3rd main road from Jakkura Main road to 1st Cross Road								
	Ch. (0 - 39)		1	39	7.00	0.300	81.90		
							274.95	**48.76**	**13406.56**

Asst. Executive Engineer
Yelahanka Sub. Divison
(BBMP Ynk. Zn)
Bangalore

Sl. No.	Description of item	Unit	Nos	Dimension			Total Qty	Rate in Rs	Amount in Rs
				L in m	B in m	D in m			
7	KSRRB M400-6.1. Construction of granular sub-base by providing close graded material, crushed stone aggregates of granite/trap/basalt material, mixing in a mechaical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. A. Plant Mix Method Close graded granular sub-base material as per 400-1 For Grading- II Material								
	(Page No 155., I.No.20.4.2 of KPWD S.R 2016-17).								
		Cum.							
	Basic rate	*1571.00*							
	Area Wieght age @ 6%	*94.26*							
	Total Rate in Rs	*1665.26*							
	6th Cross road from 2nd main road to dead end								
	Ch: (0 - 108)		1	108	5.50	0.150	89.10		
	Surabhi layout 3rd main road from Jakkura Main road to 1st Cross Road								
	Ch: (0 - 39)		1	39	7.00	0.150	40.95		
							130.05	**1665.26**	**216567.06**
8	KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite/trap/basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406								
	(Page No 158., I.No.20.18 of KPWD S.R 2016-17).								
		Cum.							
	Basic rate	*1668.00*							
	Area Wieght age @ 6%	*100.08*							
	Total Rate in Rs	*1768.08*							
	new contruction								
	6th Cross road from 2nd main road to dead end								
	Ch: (0 - 108)		1	108	5.50	0.225	133.65		
	Surabhi layout 3rd main road from Jakkura Main road to 1st Cross Road								
	Ch: (0 - 39)		1	39	7.00	0.225	61.43		
							195.08	**1768.08**	**344908.21**
9	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WBM,WMM ,including clearing of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per Specifications. MORTH Specification No. 502								
	(Page No 161., I.No.21.6 of KPWD S.R 2016-17).								
		Sqm							
	Basic rate	*26.00*							
	Area Wieght age @ 6%	*1.56*							
	Total Rate in Rs	*27.56*							
	new contruction								
	6th Cross road from 2nd main road to dead end								
	Ch: (0 - 108)	nc	1	108	5.50		594.00		
	Surabhi layout 3rd main road from Jakkura Main road to 1st Cross Road								
	Ch: (0 - 39)		1	39	7.00		273.00		
							867.00	**27.56**	**23894.52**
10	KSRRB 500-7. Providing and applying tack coat using 80/100 grade Bitumen (VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm , heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH/Chapter 5								
	(Page No 161., I.No.21.7 of KPWD S.R 2016-17).								
	Basic rate	*11.00*							
	Area Wieght age @ 6%	*0.66*							
	Total Rate in Rs	*11.66*							
	new contruction								
	6th Cross road from 2nd main road to dead end								
	Ch: (0 - 108)	nc	1	108	5.50		594.00		

Asst. Executive Engineer
Yelahanka Sub. Divison
(BBMP Ynk. Zn)
Yelahanka, Bangalore

Sl. No.	Description of item	Unit	Nos	Dimension			Total Qty	Rate in Rs	Amount in Rs
				L in m	B in m	D in m			
	Surabhi layout 3rd main road from Jakkura Main road to 1st Cross Road								
	Ch: (0 - 39)		1	39	7.00		273.00		
							867.00	**11.66**	**10109.22**
11	KSRRB M500- 17 Providing, laying dense graded bituminous macadam using 40/60 TPH capacity H.M.P with Mechanical paver Gr-II(50mm to 75mm), crushed aggregates of specified grading premixed with 4.5% VG 30 grade bituminous binder and filler, transporting the hot mix to work site , laying to the required grade,level and alignment, rolling with wheeled , vibratory and tandeem rollers to achieve the desired compaction as per MORTH Table-500-10 including all leads and lift cost of all materials, labour, HOM of machineries complete as per specifications MORTH Specification No.507 **(Page No 163., I.No.21.17.6 of KPWD S.R 2016-17).**								
		Cum.							
	Basic rate	*6071.00*							
	Area Wieght age @ 6%	*364.26*							
	Total Rate in Rs	*6435.26*							
	new contruction								
	6th Cross road from 2nd main road to dead end								
	Ch: (0 - 108)	nc	1	108	5.50	0.050	29.70		
	Surabhi layout 3rd main road from Jakkura Main road to 1st Cross Road								
	Ch: (0 - 39)		1	39	7.00	0.050	13.65		
							43.35	**6435.26**	**278968.52**
12	KSRRB M500- 19 Providing, laying bituminousConcrete using 40/60 TPH capacity H.M.P with Mechanical paver Gr-II(30mm to 45mm), crushed aggregates of specified grading premixed with 5.4% VG 30 grade bituminous binder and filler , transporting the hot mix to work site , laying to the required grade,level and alignment, rolling with wheeled , vibratory and tandeem rollers to achieve the desired compaction as per MORTH Table-500 9 including all leads and lift cost of all materials, labour, HOM of machineries complete as per specifications MORTH Specification No.509 **(Page No 165., I.No.21.22.6 of KPWD S.R 2016-17).**								
		Cum.							
	Basic rate	*6859.00*							
	Area Wieght age @ 6%	*411.54*							
	Total Rate in Rs	*7270.54*							
	new contruction								
	6th Cross road from 2nd main road to dead end								
	Ch: (0 - 108)	nc	1	108	5.50	0.030	17.82		
	Surabhi layout 3rd main road from Jakkura Main road to 1st Cross Road								
	Ch: (0 - 39)		1	39	7.00	0.030	8.19		
							26.01	**7270.54**	**189106.75**
13	Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 4kms **(Refer Table. Page No.140)**								
		Cum.							
	Basic rate	*80.80*							
	Total Rate in Rs	*80.80*							
				For item no	1		319.44		
				For item no	6		274.95		
						Sub total-2	**594.39**	**80.80**	**48026.71**
						ROAD FURNITURES			**1124987.55**
14	KSRRB M800-13 Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 (Page No 185, I.No.24.15 of KPWD S.R 2016-17).								
	Basic rate	**Sqm**							
	Area Wieght age @ 6%	*512.00*							
		30.72							

Sl. No.	Description of item	Unit	Nos	Dimension			Total Qty	Rate in Rs	Amount in Rs
				L in m	B in m	D in m			
	Total Rate in Rs	542.72							
	Road Marking								
	Edge								
	6th Cross road from 2nd main road to dead end								
	Ch: (0 - 108)		2	108	0.10		21.60		
	Surabhi layout 3rd main road from Jakkura Main road to 1st Cross Road								
	Ch: (0 - 39)		2	39	0.10		7.80		
							29.40	542.72	15955.97
	Sub Total-3								15955.97
	Total								3626166.92
15	Cost towards Preperation of DPR,PMC/QC @ 1%								36261.67
16	Cost of Plastic@ 8% of bitumen qty for BC	Kg	1	293.39				27.00	7921.61
17	Cost towards KIRDL Charges @ 9%								326355.02
18	Misellenous and other charges								3294.78
	Grand Total								4000000.00

Certificate:-

1. That the workspot has been inspected and provisions made in the estimate are adequate and necessary
2. Work spot comes with in the Bruhat Bangalore Mahanagara Palike Limits.
3. That estimate is based on the PWD SR of 2016-17
4. The work is not split up
5. These works are not taken up in any grants and free from defect liability period
6. Earlier improvements taken up in the proposed roads are recorded in road history

Consultant:
For M/s Mecadez core technologies pvt ltd

Asst. Engineer
Ward No:1
BBMP

AEE
yelahanka Sub division
BBMP

Executive Engineer
Yelahanka Sub. Divison
(BBMP Ynk. Zn)
Yelahanka, Bengalore

Executive Engineer
yelahanka division
BBMP

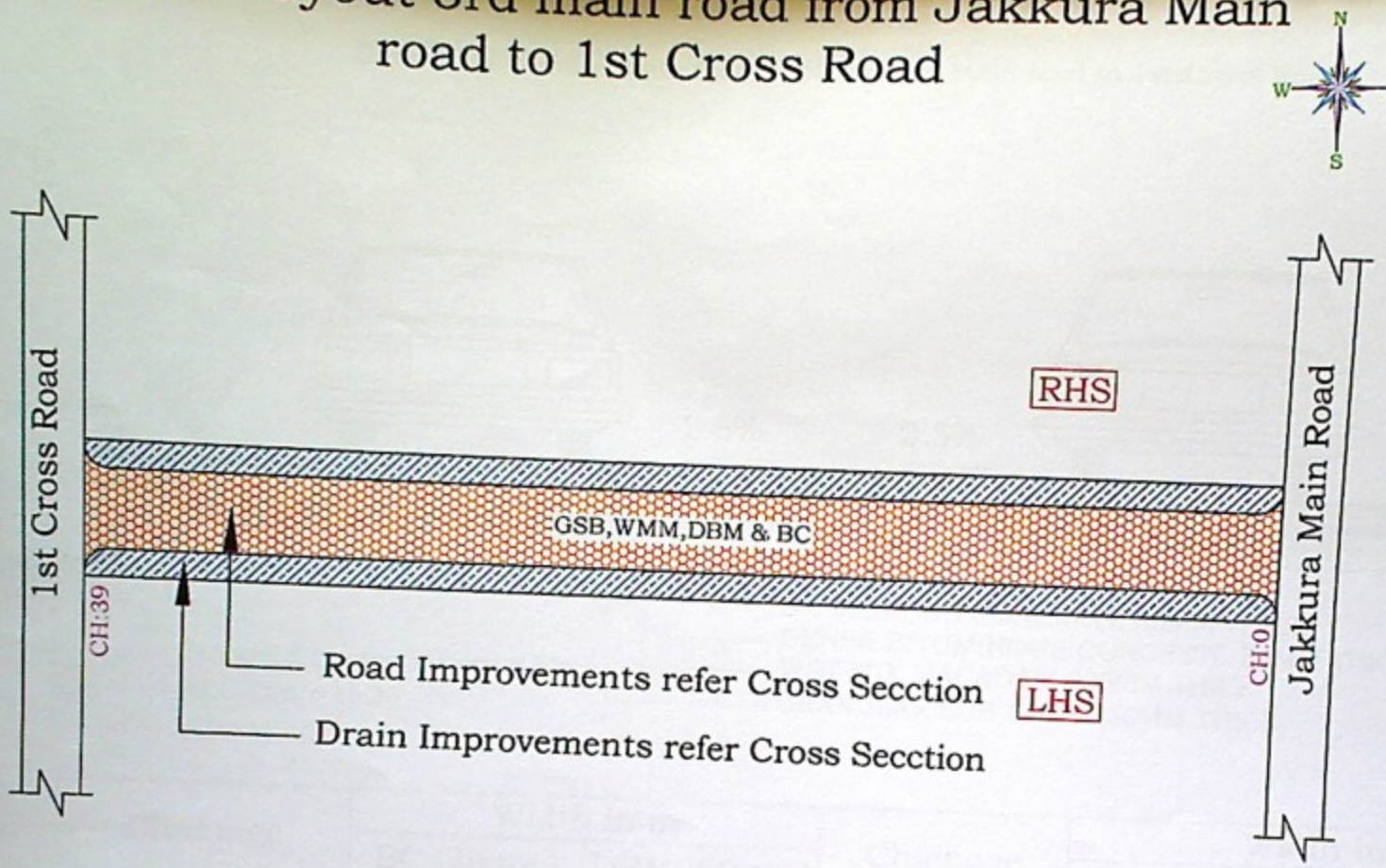
ADMINISTRATIVELY SANCTIONED FOR Rs. 40.00 lacs
Rupees Fourty Lakhs
only
Under P.3089
Issued CE ( )
Subject to conditions contained in
enclosed memo EE ( ) No
Dt Estimate Approved
JC/Yel/RR/AA/44/16-17
dated 18/3/17 Rs 40.00 lacs

Joint Commissioner
(Yelahanka Zone)
BBMP, Bengaluru-92

Technical Sanction
Accorded For 40.00 lakhs
Head W/C...P.3089
CER NO: 202 Dt: 24 03 17

ITA CE (YNK).

Surabhi layout 3rd main road from Jakkura Main road to 1st Cross Road



Index

- Reconstruction of BC road
- Drain

Assistant Engineer
Ward No - 1
BBMP

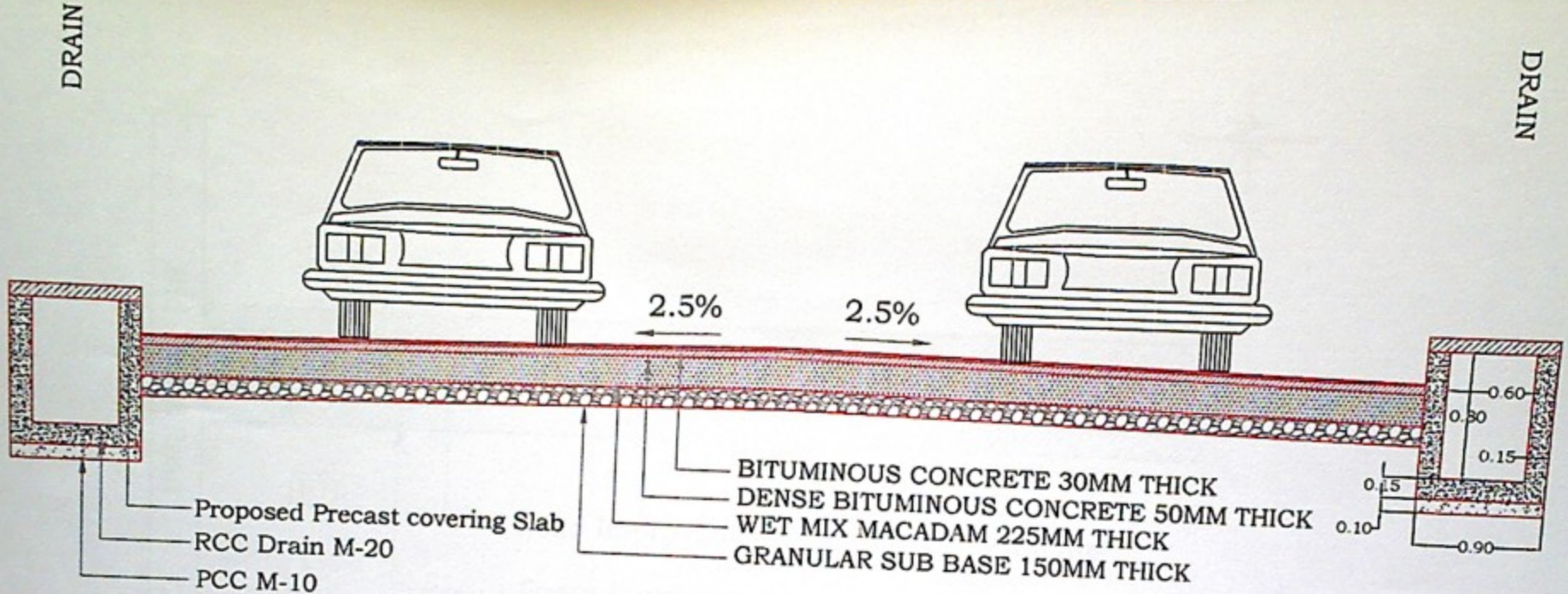
Assistant Executive Engineer
Yelahanka Sub Division
BBMP

Executive Engineer
Yelahanka Sub. Divison
(BBMP Ynk. Zn)
Yelahanka, Bangalore

Executive Engineer
Yelahanka Division
BBMP

PROJECT NAME	DRAWING TITLE		CONSULTANTS
Asphalting and improvements to roads at Shivanahalli main and cross roads ward No-01 of yelahanka sub division.	Strip Plan	BRUHAT BENGELURU MAHANAGARA PALIKE	M/s. Necadez Core Technologies Private Limited Project Management and Conultancy No.103, 1st Main Road, 3rd Cross, Nagadi Main Road, Kottigepalya, Bangalore-560091.

Surabhi layout 3rd main road from Jakkura Main road to 1st Cross Road



Chainage	Width in m		Chainage	Width in m	
	BC (30mm)	DBM (50mm)		WMM (225mm)	GSB (150mm)
Ch: (0 - 39)	7.00	7.00	Ch: (0 - 39)	7.00	7.00

Assistant Engineer
Ward No - 1
BBMP

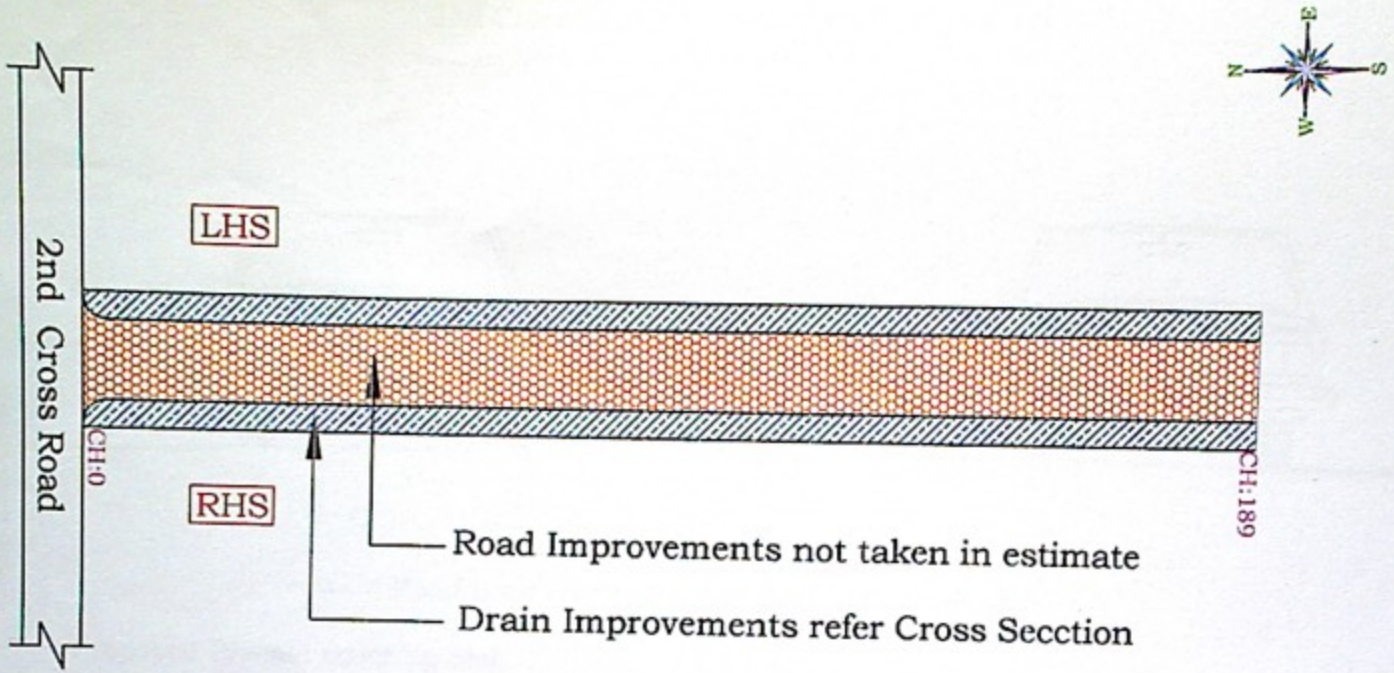
Assistant Executive Engineer
Yelahanka Sub Division
BBMP

Asst. Executive Engineer
Yelahanka Sub. Divison
(BBMP Ynk. Zn)
Yelahanka, Bangalore

Executive Engineer
Yelahanka Division
BBMP

PROJECT NAME	DRAWING TITLE		CONSULTANTS
Asphalting and improvements to roads at Shivanahalli main and cross roads ward No-01 of yelahanka sub division.	Cross section	BRUHAT BENGELURU MAHANAGARA PALIKE	M/s. Mecadez Core Technologies Private Limited Project Management and Consultancy No.103, 3rd Main Road, 3rd Cross, Magadi Main Road, Vijayanagar, Bangalore-560091.

2nd Cross road from 2nd main road to dead end



Index
- Road
- Drain

Assistant Engineer
Ward No - 1
BBMP

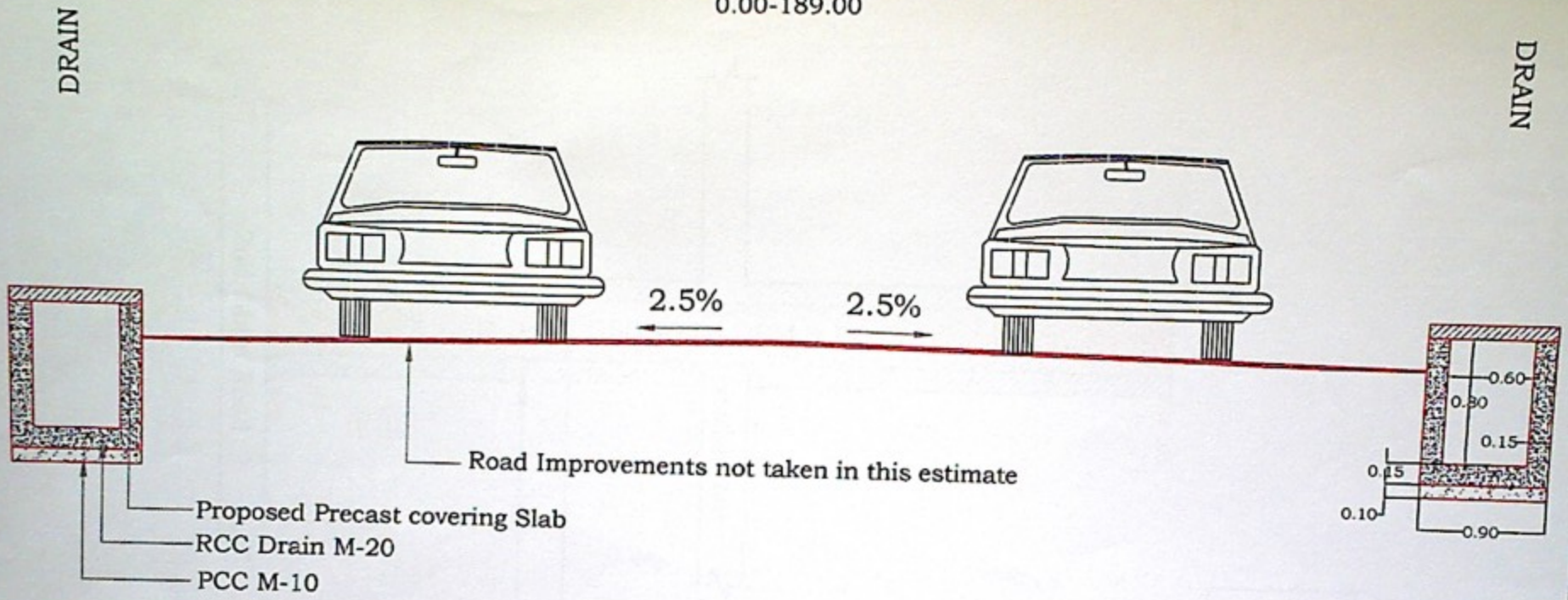
Assistant Executive Engineer
Yelahanka Sub Division
BBMP

EXECUTIVE Engineer
Asst. Executive Engineer
BBMP Sub. Divison
Yelahanka
(BBMP Ynk. Zn)
Yelahanka, Bangalore

Executive Engineer
Yelahanka Division
BBMP

PROJECT NAME	DRAWING TITLE		CONSULTANTS
Asphalting and improvements to roads at Shivanahalli main and cross roads ward No-01 of yelahanka sub division.	Strip Plan	BRUHAT BENGELURU MAHANAGARA PALIKE	M/s. Mecadez Core Technologies Private Limited Project Management & R&D Consultancy No.103, 11th Main Road, 3rd Cross, Nagadi Main Road, Kottigepalya, Bangalore-560091

2nd Cross road from 2nd main road to dead end
0.00-189.00



Assistant Engineer
Ward No - 1
BBMP

Assistant Executive Engineer
Yelahanka Sub Division
BBMP

Asst. Executive Engineer
Yelahanka Sub. Divison
(BBMP Ynk. Zn)
Yelahanka, Bangalore

Executive Engineer
Yelahanka Division
BBMP

PROJECT NAME	DRAWING TITLE		CONSULTANTS
Asphalting and improvements to roads at Shivanahalli main and cross roads ward No-01 of yelahanka sub division.	Cross section	BRUHAT BENGELURU MAHANAGARA PALIKE	M/s. Necadex Core Technologies Private Limited Project Management and Consultancy No.103, 3rd Main Road, 3rd Cross, Magadi Main Road, Bangalore